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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/584,654

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Marco Winter

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EXAMINER

PHAM, KHANH B

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,654	Applicant(s) WINTER ET AL.	
	Examiner Khanh B. Pham	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/2010 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-20** are rejected under 35 U.S.C. 102(e) as being anticipated by Hinshaw et al. (US 2004/0117037 A1), hereinafter "**Hinshaw**".

As per claim 1, Hinshaw teaches a method for searching a database on disk storage medium comprising:

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- “executing with a processor a first search step, the first search step including reading-in disk sectors of the disk storage medium and searching the database records stored in said disk sectors read-in” at [0135], [0333], [0341], [0403];
- “wherein the searching is performed with a search depth matched to a speed of the reading-in of disk sectors such that the reading-in of disk sectors is not interrupted” at [0341];
- “providing an intermediate result from the first search step” at [0341], [0403];
- “executing with the processor a second search step in the intermediate result from the first search step, wherein executing the second search uses a computational power of the processor which is remaining from executing the first step” at [0404]
- “providing an end result from the second search step” at [0395].

As per claim 2, Hinshaw teaches the method of claim 1, wherein “the processing speed in the first search step is at least as high as the read-in speed” at [0341].

As per claim 3, Hinshaw teaches the method of claim 1, wherein “only a text search is performed in the first search step” at [0341].

As per claim 4, Hinshaw teaches the method of claim 1, wherein “the first search step involves skipping to search locations from an index list in descending or ascending order on the basis of sorting exclusively according to sector numbers of the disk sectors” at [0406].

As per claim 5, Hinshaw teaches the method of claim 1, wherein “the intermediate result comprises one or more subresults which are respectively searched in the second search step” at [0403]-[0404].

As per claim 6, Hinshaw teaches the method of claim 11, wherein “the database is dynamic and is available in fragmented form and in this context the individual fragments are read in successively and a read head skips exclusively in one direction between the fragments” at [0342], [0352].

As per claim 7, Hinshaw teaches the method of claim 1, wherein “the data are stored on the disk storage medium is ECC blocks” at [0354]-[0355].

As per claim 8, Hinshaw teaches the method of claim 1, wherein “the disk storage medium is an optical disk” at [0011].

As per claim 9, Hinshaw teaches an apparatus for searching a database on a disk storage medium comprising:

- “a processor for executing a first search step, the first search step including reading-in disk sectors of the disk storage medium and searching database records stored in said disk sectors read-in” at [0135], [0333], [0341];

- “wherein the searching is performed with a search depth matched to a speed of the reading-in of disk sectors such that the reading-in of disk sectors is not interrupted” at [0341];
- “a memory device for storing and providing an intermediate result from the first search step” at [0403] and Fig. 1;
- “the processor is also designed to execute a second search step in the intermediate result from the first search step and to provide an end result from the second search step, wherein executing the second search step uses a computational power of the processor which is remaining from executing the first search step” at [0404] and Fig. 7.

As per claim 10, Hinshaw teaches the apparatus of claim 9, wherein “the processing speed in the first step is at least as high as the maximum or an instantaneous read-in speed” at [0341].

As per claim 11, Hinshaw teaches the apparatus of claim 9, wherein “an exclusive text search can be performed in the processor during the first search step” at [0341].

As per claim 12, Hinshaw teaches the apparatus of claim 9, wherein “the first search step may involve the processor skipping to search locations from an index list in descending or ascending order on the basis of sorting exclusively according to sector numbers of the disk sectors” at [0342], [0352].

As per claim 13, Hinshaw teaches the apparatus of claim 9, wherein “the intermediate result which can be stored in the memory device comprises one or more subresults which can be searched by the processor in the second step” at [0403] and Fig. 1.

As per claim 14, Hinshaw teaches the apparatus of claim 9, wherein “the database is dynamic and is available in fragmented form and in this context the individual fragments can be read into the processor successively and a read head can skip exclusively in one direction between the fragments” at [0342], [0352].

As per claim 15, Hinshaw teaches the apparatus of claim 9. “wherein the processor and the memory device are suitable for processing ECC blocks” at [0354]-[0355].

As per claim 16, Hinshaw teaches the apparatus of claim 9, wherein “the disk storage medium is an optical disk” at [0011].

As per claim 17, Hinshaw teaches the method of claim 1, wherein “the first and second search steps are executed at least partly in parallel” at [0072].

As per claim 18, Hinshaw teaches the method of claim 17, wherein “the second search step is executed with lower priority than the first search step” at [0411].

As per claim 19, Hinshaw teaches the apparatus of claim 9, wherein "the first and second search steps are executed at least partly in parallel" at [0072].

As per claim 20, Hinshaw teaches the apparatus of claim 19, wherein "the second search step is executed with lower priority than the first search step" at [0411].

Response to Arguments

2. Applicant's arguments filed 3/31/2010 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

3. Regarding the 35 U.S.C 102 rejection, Applicant argued that because "Hinshaw's JPUs has two processors: the PSDP and the CPU", and therefore concluded that Hinshaw teaches away from the claimed invention which uses a single processor". On the contrary, Hinshaw teaches at [0042] that the PSDP and the CPU can also be included in an integrated processor "on a single chip or in a single package". Hinshaw's claim 1 also recites a single data processor comprising multiple CPUs and JPUs. Hinshaw therefore teaches the use of a single data processor as claimed.

4. In view of Applicant's amendment and arguments, the 112, 1st paragraph rejection has been withdrawn.

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the Claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is **(571) 272-3574** for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-

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4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh B. Pham/
Primary Examiner
Art Unit 2166

January 12, 2011